

JSP - XML DATA

http://www.tutorialspoint.com/jsp/jsp_xml_data.htm

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When you send XML data via HTTP, it makes sense to use JSP to handle incoming and outgoing XML documents for example RSS documents. As an XML document is merely a bunch of text, creating one through a JSP is no more difficult than creating an HTML document.

Sending XML from a JSP:

You can send XML content using JSPs the same way you send HTML. The only difference is that you must set the content type of your page to text/xml. To set the content type, use the `<%@page%>` tag, like this:

```
<%@ page contentType="text/xml" %>
```

Following is a simple example to send XML content to the browser:

```
<%@ page contentType="text/xml" %>

<books>
  <book>
    <name>Padam History</name>
    <author>ZARA</author>
    <price>100</price>
  </book>
</books>
```

Try to access above XML using different browsers to see the document tree presentation of the above XML.

Processing XML in JSP:

Before you proceed with XML processing using JSP, you would need to copy following two XML and XPath related libraries into your <Tomcat Installation Directory>\lib:

- **XercesImpl.jar:** Download it from <http://www.apache.org/dist/xerces/j/>
- **xalan.jar:** Download it from <http://xml.apache.org/xalan-j/index.html>

Let us put following content in books.xml file:

```
<books>
<book>
  <name>Padam History</name>
  <author>ZARA</author>
  <price>100</price>
</book>
<book>
  <name>Great Mistry</name>
  <author>NUHA</author>
  <price>2000</price>
</book>
</books>
```

Now try the following main.jsp, keeping in the same directory:

```
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="x" uri="http://java.sun.com/jsp/jstl/xml" %>

<html>
<head>
```

```

<title>JSTL x:parse Tags</title>
</head>
<body>
<h3>Books Info:</h3>
<c:import var="bookInfo" url="http://localhost:8080/books.xml"/>

<x:parse xml="${bookInfo}" var="output"/>
<b>The title of the first book is</b>:
<x:out select="$output/books/book[1]/name" />
<br>
<b>The price of the second book</b>:
<x:out select="$output/books/book[2]/price" />

</body>
</html>

```

Now try to access above JSP using `http://localhost:8080/main.jsp`, this would produce following result:

Books Info:

The title of the first book is:Padam History

The price of the second book: 2000

Formatting XML with JSP:

Consider the following XSLT stylesheet `style.xsl`:

```

<?xml version="1.0"?>
<xsl:stylesheet xmlns:xsl=
"http://www.w3.org/1999/XSL/Transform" version="1.0">

<xsl:output method="html" indent="yes"/>

<xsl:template match="/">
  <html>
  <body>
    <xsl:apply-templates/>
  </body>
</html>
</xsl:template>

<xsl:template match="books">
  <table border="1" width="100%">
    <xsl:for-each select="book">
      <tr>
        <td>
          <i><xsl:value-of select="name"/></i>
        </td>
        <td>
          <xsl:value-of select="author"/>
        </td>
        <td>
          <xsl:value-of select="price"/>
        </td>
      </tr>
    </xsl:for-each>
  </table>
</xsl:template>
</xsl:stylesheet>

```

Now consider the following JSP file:

```

<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>

```

```

<%@ taglib prefix="x" uri="http://java.sun.com/jsp/jstl/xml" %>

<html>
<head>
  <title>JSTL x:transform Tags</title>
</head>
<body>
<h3>Books Info:</h3>
<c:set var="xmltext">
  <books>
    <book>
      <name>Padam History</name>
      <author>ZARA</author>
      <price>100</price>
    </book>
    <book>
      <name>Great Mistry</name>
      <author>NUHA</author>
      <price>2000</price>
    </book>
  </books>
</c:set>

<c:import url="http://localhost:8080/style.xml" var="xslt"/>
<x:transform xml="${xmltext}" xslt="${xslt}"/>

</body>
</html>

```

This would produce following result:

Books Info:

<i>Padam History</i>	ZARA	100
<i>Great Mistry</i>	NUHA	2000

For more detail on XML processing using JSTL, you can check [JSP Standard Tag Library](#).